**8**. [10 points] Determine if the following series converges absolutely, converges conditionally, or diverges, and circle the corresponding option. **Fully justify** your answer including using **proper notation** and showing mechanics of any tests you use.

$$\sum_{n=2}^{\infty} \frac{(-1)^n}{n(\ln n)^{0.3}}$$

*Circle one:*      **Converges Absolutely**      **Converges Conditionally**      **Diverges**

*Justification:*